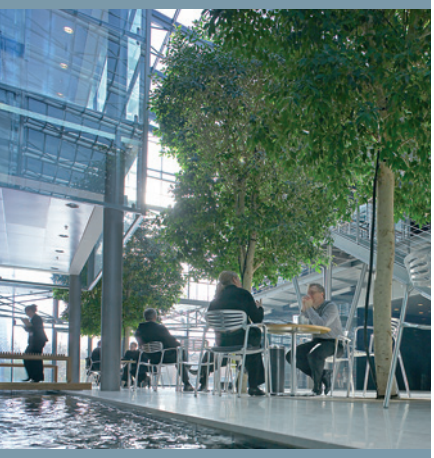


CCTV

SISTORE MX – the hybrid video surveillance system for 64 cameras

Building Technologies

SIEMENS

A new dimension of surveillance

SISTORE MX is a flexible, hybrid surveillance and image recording system that can be used in a multitude of applications. From banks and industrial facilities to train stations and shopping centres, the system is designed for all applications. SISTORE MX is ideal for integration with other security systems due to the numerous connection possibilities available. Integrated motion detection enables both indoor and outdoor surveillance.

Transportation system

Safe and secure into the future with Siemens' hybrid technology

Hybrid recording system with up to 64 camera inputs
Siemens hybrid technology unifies both analogue and digital technologies in a single system, therefore allowing a smooth upgrade of existing systems. With ten available models, up to 32 standard analogue cameras and 32 IP cameras can be connected, with various hard disk sizes, and DVD burning options.

Integration in other systems
Via the integrated software interface, SISTORE MX can be controlled by IVM, the interactive video management software, SiPass® access control system, and MM8000, the danger management system from Siemens, to name but a few.

PTZ control for both speed dome cameras and pan/tilt devices
Both speed dome and pan/tilt/zoom cameras can be controlled via the on-screen interface of SISTORE MX. Preset positions can be set and recalled simply, together with setting patrols, where the camera moves from one preset position to another automatically and "patrols" the facility.

Support of third-party IP cameras including PTZ control
SISTORE MX can also be connected to third-party IP cameras that have already been installed and, if these are functional cameras, then SISTORE MX also supports PTZ control over a network.

Full "pentaplex" operation
SISTORE MX is a pentaplex system – one which enables the user to simultaneously continue to record, watch a live multi-screen picture display whilst playing back previously recorded video scenes on the same monitor and remote viewing over a network or dialup connection.

Tamper protection and temperature management integrated
This hybrid recording system is equipped with integrated sabotage protection, recognising camera re-positioning, covering, spraying and defocusing. The integrated temperature management reduces maintenance time and cost, ensuring true system protection.

Site plan feature for easy orientation in the monitored area
Cameras positioned in a site plan can be displayed easily via mouse click. This feature helps operating personnel to track suspicious people for example, without having to remember the next camera number.

Certified as complying with the German Accident Prevention Regulations for Banks (UVV Kassen)
SISTORE MX is certified as complying with the German Accident Prevention Regulations for Banks (the highest certification standard in Germany), which is required by every bank.

"Kalagate" security certification
SISTORE MX is certified by the Kalagate Imagery Bureau. Based in England, Kalagate independently certifies digital equipment verifying that the captured and stored images are admissible as evidence in criminal and civil judicial courts of law.

Highlights

- Hybrid digital recording system with up to 64 camera inputs
- Records up to 200 images per second
- Integration with IVM, SiPass, MM8000
- Control of PTZ and dome cameras
- Support of third-party IP cameras including PTZ control
- Full pentaplex operation
- Tamper protection and temperature management integrated
- Site plan feature
- Certified as complying with the German Accident Prevention Regulations for Banks (UVV Kassen)
- Kalagate security certification for use as evidence in court
- New models with integrated DVD burner

s

Banks

Retail stores

Comprehensive features that are simple to operate

Flexible remote monitoring
In networked applications during an alarm condition, SISTORE MX can provide a direct link to the remote viewing software, to allow immediate access to the images over the network, or send SMS and if required an e-mail. This included RemoteView software can also perform a "site-tour" – automatically connecting and disconnecting to pre-defined remote sites allowing the operator to simply sit back and watch the tour on the monitor.

Basic matrix switching
It is possible to have a total of 4 analogue monitor outputs – these can be used to switch any of the 32 analogue cameras, creating a basic 32 x 4 switcher. Monitors can be programmed to act as alarm monitors and SISTORE MX will automatically switch cameras upon alarm activation.

Reference image
Benefiting both installers and end users is the facility to store a "reference image" of the installed camera – so should it be moved, maliciously or otherwise, or simply if it has to be serviced, there is an exact record of its viewing position.

Various different display options
With the connection of up to 64 cameras possible, multiple screen display options are provided to the user to ensure the optimum viewing conditions.

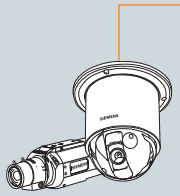
Motion detection
To optimise hard disk storage, the pixel-based motion detection system allows the user to define areas of interest in a scene and only when motion occurs inside this area, will the images be recorded.

Covert camera mode
Any camera can be recorded, but not displayed depending upon the user level, so cameras monitoring cash registers could only be monitored by Managers for example.

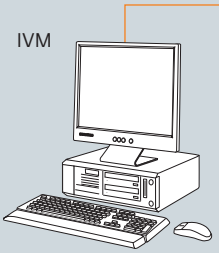
Quick and easy searching
To ensure the fastest method of finding images, a mask can be defined in the area of interest, filtering the playback to only that area and ensuring no time is wasted watching hours of useless video. Also, there is the timeline search, showing all recorded images across the cameras, including showing movement detection, alarm triggers etc. – just drag the line to the time or date required – simple. Of course it is also possible to search according to standard criteria such as date, time, camera and logbook.

Support of megapixel recording
SISTORE MX supports the recording of megapixel IP cameras. Megapixel recordings contain more information, particularly useful when using the integrated digital zoom feature.

Interoperable security systems from Siemens
Utilising SiPass access control software from Siemens, operators have a clear overview of their buildings, including open doors or windows. If either the access control or intrusion detection system trigger an alarm, SISTORE MX automatically starts recording the relevant camera located in the alarm zone area. The video images can be replayed as alarm verification directly in the SiPass software. Activating and deactivating of intrusion alarm zones is then also possible via SiPass software, as well as automatically restricting access control rights during an alarm situation.

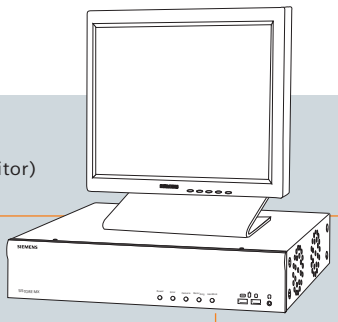


Up to **32 analogue cameras** can be connected to the system; these can be a mixture of colour or mono, indoor or outdoor cameras, pan/tilt/zoom cameras, fixed cameras or speed dome cameras.

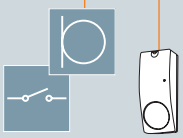


IVM (Interactive Video Software) for integrated control of video systems. This management system allows the operator to control a security system via the graphical user interface.

Various different display options



SISTORE MX
(plus 1x VGA monitor)

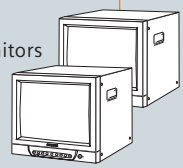


32 alarm inputs
8 digital inputs
1 audio input

16 alarm outputs

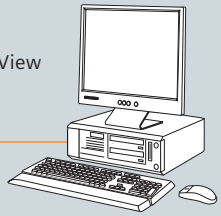
The SISTORE MX has **32 alarm inputs,** from which recording can be started or speed adjusted. The 8 digital inputs are reserved for specific alarm inputs e. g. UPS power failure, start/stop recording. The 16 alarm outputs are designed to connect to alarm systems, turn on lights or trigger a loudspeaker pre-recording. It is also possible to record a single audio channel linked to a pre-defined camera. An alarm input could come also from a Siemens intrusion detection system.

1 ... 4
analogue monitors



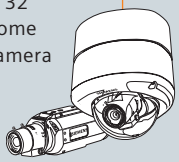
Up to 4 analogue monitors can be connected to the SISTORE MX; as well as having the option to display covert or standard cameras, alarm images are also automatically displayed and switched between monitors, enabling flexible viewing of a whole site.

1 ... 16
RemoteView

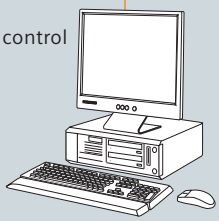


LAN/PSTN
DSL/ISDN

1 ... 32
IP dome
IP camera

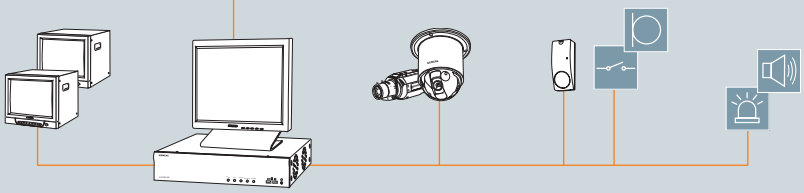


SiPass
access control



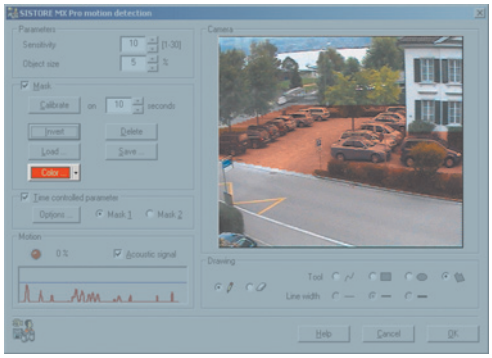
Remote operation (RemoteView)
Up to 16 RemoteView clients have access to SISTORE MX. Each RemoteView client can display the images of up to 8 SISTORE MX devices at the same time. The "site-tour" feature is an automatic, sequential connection to multiple SISTORE MX devices.

SISTORE MX can be connected to a SiPass access control system to enable quick and easy searches for events triggered in the SISTORE MX system (e.g. alarm inputs, alarm outputs, recordings, motion detection, etc.) using the SiPass software.

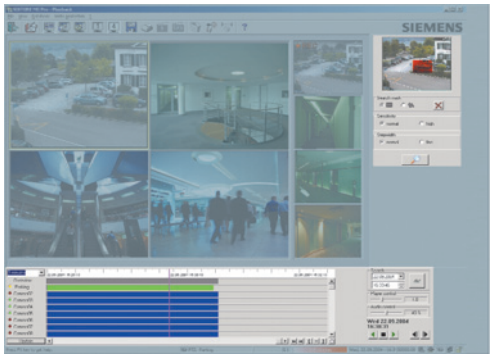


SISTORE MX

Motion detection



Quick and easy searching using timeline or filter.



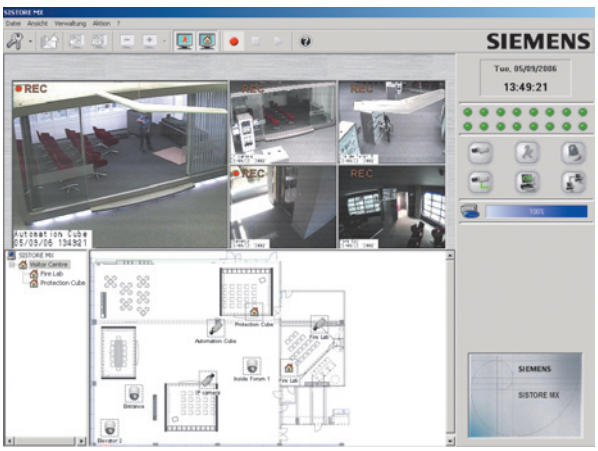
Additional features provided by SISTORE MX

Site plan feature
It is always difficult to remember all camera numbers and positions. The new site plan feature of SISTORE MX provides a full visual overview of a facility. Site plans or photos of facilities can be loaded easily by adding the appropriate symbol for the camera position to the site plan. In addition to this, it is possible to add additional cards for individual rooms or floors and link these so as to be able to easily switch between rooms or floors. This is an important feature for operating personnel when tracking suspicious persons on the premises.

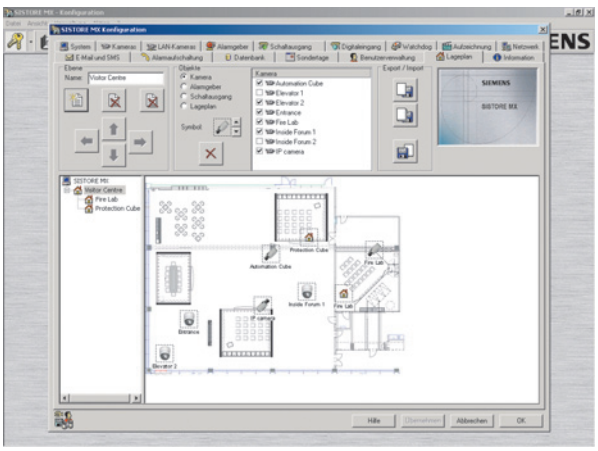
Cash register connection
The serial interface with which SISTORE MX is equipped can be used to connect various different cash register systems, therefore making the system suitable for use in retail stores, shopping centres etc. Recording can be initiated for a corresponding camera based on special word/line filters placed on the data sent from the cash register as well as defined alarm filters. The same filter words can then be used as search criteria for subsequent research.

Automatic backup
SISTORE MX can automatically backup full or partial video and audio recordings on an external drive. The time and days of the week can be configured for backup. The user can choose whether to carry out full or incremental backup. As opposed to full backup, incremental backup is used to store all files that have been created since the last backup therefore requiring considerably less time and storage capacity on the target drive.

The site plan feature helps operating personnel track suspicious persons.



Simply add and position cameras on the site plan via drag and drop.



SISTORE RAID

Multiple server operation

The new multiple server operation feature enables simultaneous access to several SISTORE MX devices from a remote operating station and therefore allows for monitoring several locations at the same time using RemoteView. Images from a specific camera are displayed by simply selecting the camera from the list. Up to 768 (8 x 96) cameras can be listed and live images from up to 36 (6 x 6) cameras can be displayed at once.

External storage expansion possibilities (e.g. RAID 1 or RAID 5/6)

Should large video storage be required for longer recordings, SISTORE MX has a SCSI output that can be used to extend the hard disk storage of the system to an external RAID system which can be the Siemens SISTORE RAID or a third-party product.

SISTORE RAID

Connect up to two SISTORE™ recording devices simultaneously via the two SCSI ports available on SISTORE RAID. Utilising the hot-swappable drives, hard disks can be exchanged while the system is working, therefore ensuring continuous operation as a reboot is not necessary. An integrated LCD display ensures easy local configuration, while management software offers remote browser-based administration. Performance is of the highest level, utilising IBM RISC architecture, ensuring data is both stored and accessible on demand.

Highlights

- Site plan feature for easy orientation in large monitored areas
- Connection of cash registers of various suppliers
- Automatic backup for highest safety of data
- Connection of SISTORE RAID or third-party product for extension of storage
- Connection of ATM machines and easy searching video images belonging to certain transactions

Searching for video images belonging to certain transaction data

Technical overview

	SISTORE MX3208 250/200 SISTORE MX3216 500/200 SISTORE MX3232 1000/200	SISTORE MX3204 *250/150 DVD SISTORE MX3208 250/200 DVD SISTORE MX3216 500/200 DVD SISTORE MX3232 1000/200 DVD
Display		
Video inputs (analogue)	8/16/32	4/8/16/32
Video inputs (digital IP/Ethernet)	32	32
Monitor outputs	5 (4 x BNC, 1 x VGA)	*3 (2 x BNC, 1 x VGA), 5 (4 x BNC, 1 x VGA)
Audio inputs/outputs	1	1
Video recording resolution (H x V)	704 x 288 (high) 384 x 288 (standard) max. 2048 x 1536 (IP megapixel)	704 x 288 (high) 384 x 288 (standard) max. 2048 x 1536 (IP megapixel)
Live display formats	1 (full screen), 2 x 2 (quad), 1 + 5, 3 x 3, 2 x 8, 4 x 9, 4 x 4, 6 x 6 - 4	1 (full screen), 2 x 2 (quad), 1 + 5, 3 x 3, 2 x 8, 4 x 9, 4 x 4, 6 x 6 - 4
Covert camera mode	■	■
Recording		
Maximum recording speed – no local playback	100 ips – analogue cameras 100 ips – IP cameras	100 ips – analogue cameras 100 ips – IP cameras
Maximum recording speed – during local playback	100 ips – analogue cameras 100 ips – IP cameras	100 ips – analogue cameras 100 ips – IP cameras
Maximum recording speed – playback via RemoteView software	100 ips – analogue cameras 100 ips – IP cameras	100 ips – analogue cameras 100 ips – IP cameras
Recording schedules	user-defined	user-defined
Alarms		
Alarm inputs	32	*16 / 32
Digital inputs	8	*4 / 8
Alarm outputs	16	*8 / 16
Video loss detection	■	■
Activity detection	> 25,000 zones	> 25,000 zones
Internal buzzer	■	■
Alarm log	■	■
Sabotage detection	■	■
Controls		
SmartSearch	■	■
PTZ/dome control	■	■
Fast forward/rewind controls	x 0.1 to x 50 speed	x 0.1 to x 50 speed
Comprehensive user management	■	■
Connectivity		
Ethernet LAN/WAN connector	■	■
External modem connector (ISDN)	via USB	via USB
RemoteView software (license-free)	■	■
VSS-SDK/IVM/MM8000	■	■
SiPass access control interface	■	■
Export/backup		
Image export	JPG, AVI, K26	JPG, AVI, K26
Image backup/archive	USB to CD/DVD burner/SCSI	Internal DVD burner/SCSI
Max. hard disk capacity (int.)	2 TB (dependent on model)	1.5 TB (dependent on model)

Complementing the range of models: SISTORE MX with DVD burner.

Welcome to the world of innovative thinking

Innovation

For the last 160 years, Siemens has been investing a great deal in both manpower and research and development. This has ensured a constant stream of new insights, technologies and inventions that enable us to continuously improve the reliability of our products and systems to make them easier to install and operate.

Advances in digital technologies are creating a whole new world of possibilities. Siemens has been at the leading edge of progress in this field and continues to redefine both current and future technologies.

Interoperability

Interoperable systems are now supplied alongside such basic requirements as lighting, heating and water in a building. As a company, we know that integration supports the business environment through the interaction of products and systems. We break down the barriers between our access control, intrusion detection and video surveillance product lines in our security portfolio and listen to what the market actually wants. We then develop to deliver both fully integrated and interoperable security systems, based on our 30 years of know-how in security.

Siemens Switzerland Ltd
Building Technologies Group
International Headquarters
Gubelstrasse 22
6301 Zug
Switzerland
Tel +41 41 724 24 24
Fax +41 41 724 35 22

Siemens Building Technologies
A Division of Siemens Ltd (Australia)
885 Mountain Hwy
Bayswater, VIC, 3153
Australia
Tel +61 3 9721 2000
Fax +61 3 9720 9966

Siemens Limited
Building Technologies
Units 1006-10
10/F, China Resources Building
26 Harbour Road
Wanchai
Hong Kong
Tel +852 2870 7888
Fax +852 2407 4457

Siemens Pte Limited
Building Technologies
The Siemens Center
60 MacPherson Road
348615
Singapore
Tel +65 6490 6000
Fax +65 6490 6001

Bewator Limited
A Siemens Business
Brecon House
Llantarnam Park
Cwmbran
NP44 3AB
United Kingdom
Tel +44 871 386 0800
Fax +44 871 386 0888

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

Subject to change • Order no. A24205-A336-B500 •
© Siemens Switzerland Ltd • Printed in Switzerland • XXXXXXXXX Ah

www.siemens.com/sistoremx